

The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing Of Claims:

1. (Currently amended) An isolated or recombinant nucleic acid comprising a polynucleotide sequence selected from the group consisting of:

(a) SEQ ID NO:1 or a complementary polynucleotide sequence thereof;
(b) a polynucleotide sequence that is greater than 97.8% identical to SEQ ID NO:1 or a complementary polynucleotide sequence thereof, as determined by Nucleotide-Nucleotide Basic Local Alignment Search Tool (BLASTN) using default parameters, wherein the polynucleotide sequence encodes an infectious, replicating respiratory syncytial virus (RSV);

(c) ~~a polynucleotide sequence comprising at least one unique polynucleotide subsequence comprising at least 10 contiguous nucleotides of SEQ ID NO:1 or a complementary polynucleotide sequence thereof, with the proviso that the unique polynucleotide subsequence includes at least one subsequence not included in SEQ ID NOs:14-19 or a complementary polynucleotide sequence thereof;~~ and,

(c) a polynucleotide sequence encoding an amino acid sequence or unique subsequence selected from the group consisting of (i) an amino acid sequence that is greater than 99.3% identical to SEQ ID NO:2, (ii) an amino acid sequence that is greater than 98.4% identical to SEQ ID NO:3, (iii) an amino acid sequence that is greater than 99.7% identical to SEQ ID NO:4, (iv) an amino acid sequence that is greater than 98.3% identical to SEQ ID NO:5, (v) an amino acid sequence that is greater than 99.6% identical to SEQ ID NO:6, (vi) an amino acid sequence that is greater than 97.0% identical to SEQ ID NO:7, (vii) an amino acid sequence that is greater than 99.3% identical to SEQ ID NO:8, (viii) an amino acid sequence that is greater than 99.5% identical to SEQ ID NO:9, (ix) an amino acid sequence that is greater than 96.4% identical to SEQ ID NO:10, and (x) an amino acid sequence that is greater than 99.2% identical to SEQ ID NO:11, as determined by BLASTP using default parameters ~~SEQ ID NOs:2-11 or an artificial conservative variation thereof, wherein an RSV that comprises the amino acid sequence is infectious and replicating~~.

2. (Previously presented) The nucleic acid of claim 1, wherein the nucleic acid is selected from the group consisting of a DNA, a cDNA, an RNA, and an artificial nucleic acid.

3. (Canceled).

4. (Original) The nucleic acid of claim 1, wherein the polynucleotide sequence of (b) is at least 98.5% identical to SEQ ID NO:1 or a complementary polynucleotide sequence thereof, as determined by BLASTN using default parameters.

5. (Canceled).

6. (Currently amended) The nucleic acid of claim 1, comprising at least one artificially mutated nucleotide or comprising at least one artificially mutated nucleotide which comprises one or more of: a deleted nucleotide, ~~an inserted nucleotide~~, an inserted nucleotide, or a substituted nucleotide.

7-9. (Canceled).

10. (Original) The nucleic acid of claim 6, wherein at least one polypeptide encoded by the nucleic acid comprises at least one deleted, inserted, or substituted amino acid residue.

11. (Original) The nucleic acid of claim 10, wherein the polypeptide comprises at least one conservatively substituted amino acid residue.

12. (Original) The nucleic acid of claim 6, wherein the at least one artificially mutated nucleotide is located in the open reading frame encoding the polypeptide of SEQ ID NO:12.

13. (Canceled).

14. (Previously presented) The nucleic acid of claim 6, wherein the open reading frame encoding the polypeptide of SEQ ID NO:12 is deleted, or wherein the open reading frame encoding the polypeptide of SEQ ID NO: 10 is deleted.

15. (Previously presented) The nucleic acid of claim 12, wherein the at least one artificially mutated nucleotide comprises a deletion, and wherein the nucleotides encoding amino acid residues 164-197 of SEQ ID NO:12 are deleted.

16. (Original) The nucleic acid of claim 6, wherein the at least one artificially mutated nucleotide is located in the open reading frame encoding the polypeptide of SEQ ID NO:10.

17-18. (Canceled).

19. (Original) The nucleic acid of claim 16, wherein at least one of the nucleotides encoding amino acid residue 1, amino acid residue 4, amino acid residue 10, or a combination thereof, of SEQ ID NO:10 is mutated.

20. (Currently amended) The nucleic acid of claim 1, ~~wherein the unique polynucleotide subsequence of (c) encodes at least 20, at least 50, at least 100, or at least 200 contiguous amino acid residues of any one of SEQ ID NOs:2-12;~~ wherein the unique polynucleotide subsequence of [(d)](c) comprises at least one complete open reading frame; wherein the unique polynucleotide subsequence of [(d)](c) comprises at least one complete open reading frame which encodes a polypeptide selected from the group consisting of SEQ ID NOs:2-12; or comprising a plurality of complete open reading frames .

21-34. (Canceled).

35. (Withdrawn) A recombinant respiratory syncytial virus comprising the nucleic acid of claim 1.

36-38. (Canceled).

39. (Withdrawn) An immunogenic composition comprising an immunologically effective amount of the recombinant respiratory syncytial virus of claim 35.

40-45. (Canceled).

46. (Withdrawn) An isolated or recombinant polypeptide comprising an amino acid sequence selected from the group consisting of:

(a) an amino acid sequence selected from the group consisting of SEQ ID NOs:2-11;

(b) a unique amino acid subsequence comprising at least 7 contiguous amino acid residues of any one of SEQ ID NOs:2-11;

(c) an amino acid sequence or subsequence corresponding to an artificial conservative variation of an amino acid sequence or subsequence of (a) or (b);

(d) an amino acid sequence that is greater than 99.3% identical to SEQ ID NO:2, an amino acid sequence that is greater than 98.4% identical to SEQ ID NO:3, an amino acid sequence that is greater than 99.7% identical to SEQ ID NO:4, an amino acid sequence that is greater than 98.3% identical to SEQ ID NO:5, an amino acid sequence that is greater than 99.6% identical to SEQ ID NO:6, an amino acid sequence that is greater than 97.0% identical to SEQ ID NO:7, an amino acid sequence that is greater than 99.3% identical to SEQ ID NO:8, an amino acid sequence that is greater than 99.5% identical to SEQ ID NO:9, an amino acid sequence that is greater than 96.4% identical to SEQ ID NO:10, or an amino acid sequence that is greater than 99.2% identical to SEQ ID NO:11, as determined by BLASTP using default parameters;

and,

(e) an amino acid sequence or subsequence that is specifically bound by an antibody that specifically binds to an amino acid sequence or subsequence encoded by SEQ ID NO:1, wherein said antibody does not specifically bind to an amino acid sequence or subsequence encoded by SEQ ID NO:13 or SEQ ID NO:14.

47. (Withdrawn) The polypeptide of claim 46, wherein the amino acid sequence of (d) is at least 99.5% identical to SEQ ID NO:2, at least 98.6% identical to SEQ ID NO:3, at least 99.9% identical to SEQ ID NO:4, at least 98.5% identical to SEQ ID NO:5, at least 99.8% identical to SEQ ID NO:6, at least 97.2% identical to SEQ ID NO:7, at least 99.5% identical to SEQ ID NO:8, at least 99.7% identical to SEQ ID NO:9, at least 96.6% identical to SEQ ID NO:10, or at least 99.4% identical to SEQ ID NO:11, as determined by BLASTP using default parameters.

48. (Withdrawn) The polypeptide of claim 46, comprising at least one artificially altered amino acid, or comprising at least one artificially altered amino acid which comprises one or more of: a deleted amino acid, an inserted amino acid, or a substituted amino acid.

49-52. (Canceled).

53. (Withdrawn) An immunogenic composition comprising an immunologically effective amount of the polypeptide of claim 46.

54-59. (Canceled).

60. (Withdrawn) An isolated or recombinant polypeptide comprising the amino acid sequence of SEQ ID NO:12 with a deletion of residues 164-197, or an artificial conservative variation thereof.

61-65. (Canceled).

66. (Withdrawn) The polypeptide of claim 46, comprising the amino acid sequence of SEQ ID NO:8.

67. (New) An isolated or recombinant nucleic acid comprising at least one unique polynucleotide subsequence comprising at least 10 contiguous nucleotides of SEQ ID NO:1 or a complementary polynucleotide sequence thereof, with the proviso that the unique polynucleotide subsequence includes at least one subsequence not included in SEQ ID NOs:14-19 or a complementary polynucleotide sequence thereof.

68. (New) The nucleic acid of claim 67 wherein the nucleic acid comprises at least one unique polynucleotide subsequence comprising at least 100 contiguous nucleotides of SEQ ID NO:1.

69. (New) The nucleic acid of claim 67 wherein the nucleic acid comprises at least one unique polynucleotide subsequence comprising at least 500 contiguous nucleotides of SEQ ID NO:1.

70. (New) The nucleic acid of claim 67 wherein the nucleic acid comprises at least one unique polynucleotide subsequence comprising at least 1000 contiguous nucleotides of SEQ ID NO:1.

71. (New) The nucleic acid of claim 67 wherein the unique polynucleotide subsequence encodes at least 20, at least 50, at least 100, or at least 200 contiguous amino acid residues of any one of SEQ ID NOs:2-12.

72. (New) The nucleic acid of claim 67, wherein the nucleic acid further comprises at least one polynucleotide subsequence from a different strain of virus, at least

one polynucleotide subsequence from a different strain of human RSV, or at least one polynucleotide subsequence from a different species of virus.

73. (New) The nucleic acid of claim 71 wherein the unique polynucleotide subsequence encodes at least 200 contiguous amino acid residues of SEQ ID NO:8, at least 50 contiguous amino acid residues of SEQ ID NO:10, or at least 200 contiguous amino acid residues of SEQ ID NO:11.